

**IN THE UNITED STATES DISTRICT
COURT FOR THE EASTERN DISTRICT
OF TEXAS MARSHALL DIVISION**

GESTURE TECHNOLOGY PARTNERS,
LLC,

Plaintiff

v.

HUAWEI DEVICE CO., LTD.,
HUAWEI DEVICE USA, INC.,

Defendants.

JURY TRIAL DEMANDED

C.A. NO. 2:21-cv-00040-JRG

LEAD CONSOLIDATED CASE

SAMSUNG ELECTRONICS CO., LTD.
AND SAMSUNG ELECTRONICS AMERICA,
INC.,

Defendants.

C.A. NO. 2:21-cv-00041-JRG

**PLAINTIFF GESTURE TECHNOLOGY PARTNERS, LLC'S
OPENING CLAIM CONSTRUCTION BRIEF**

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I. INTRODUCTION

Plaintiff Gesture Technology Partners, LLC (“GTP”) files this opening claim construction brief. GTP was founded in 2013 by Dr. Timothy Pryor, the sole inventor of the Asserted Patents.¹ Dr. Pryor is a named inventor on over 200 patents and patent applications. For the past four decades, he has been a pioneer in laser-sensing, motion-sensing, machine-vision, and camera-based-interactive technology. Dr. Pryor conceived of the inventions embodied in the Asserted Patents in the mid- to late-1990s when he was working on a variety of different projects related to imaging and computer control.

Over 20 years ago, Dr. Pryor developed gesture-based technology that has become fundamental in mobile phones and tablets today. Because Dr. Pryor’s inventions are fundamental, the language of the claims of the Asserted Patents recites well-understood, commonly used terms. To combat this, Defendants try to depart from the plain and ordinary meaning of the terms and import unclaimed—and in many cases undisclosed—limitations into the claims. But Defendants fail to identify any instance in which Dr. Pryor or GTP expressly relinquished claim scope to necessitate any departure from the plain and ordinary meaning. Accordingly, GTP respectfully submits that the Court should reject Defendants’ proposed constructions and construe these terms according to their plain and ordinary meaning.

II. THE ASSERTED PATENTS

The Asserted Patents are generally directed to innovations in using mobile-device cameras to assist a user to interact with their device, for example including, but not limited to, unlocking the device, taking and using photos or videos, and providing other functions. The patents identify

¹ “Asserted Patents” means U.S. Patent Nos. 7,933,431 (the “’431 Patent”) (attached as Ex. A), 8,194,924 (the “’924 Patent”) (attached as Ex. B), 8,553,079 (the “’079 Patent”) (attached as Ex. C), and 8,878,949 (the “’949 Patent”) (attached as Ex. D).

many benefits of using cameras and sensors to conveniently control computers and handheld devices.

1. The '431 Patent

U.S. Patent No. 7,933,431 (the "'431 Patent"), entitled "Camera Based Sensing In Handheld, Mobile, Gaming, Or Other Devices," claims priority to U.S. Provisional Application No. 60/142,777 filed on July 8, 1999. *See* Ex. A. The '431 Patent is directed towards methods and apparatuses "to enable rapid TV camera and computer-based sensing in many practical applications, including, but not limited to, handheld devices, cars, and video games." Ex. A. at Abstract. In some embodiments, the patent describes the use of computer devices and one or more cameras that "optically sens[e] human input" with applications in a "variety of fields such as computing, gaming, medicine, and education." Ex. A. at 2:7-17.

In some embodiments, the '431 Patent discloses a handheld device, such as a cell phone, that processes imaging from a person or object to control functions on the handheld device. ' Ex. A. at 11:62:-67. The '431 Patent describes that the handheld device can "perform a control function by determining [] position, orientation, pointing direction or other variable with respect to one or more external objects, using an optical sensing apparatus . . . or with a camera located in the handheld device, to sense datums or other information external for example to the device." Ex. A. at 12:1-9. The '431 Patent describes that the device is able to "acquire features of an object and use it to determine something" such as object recognition. Ex. A. at 13:5-21.

2. The '924 Patent

U.S. Patent No. 8,194,924 (the "'924 Patent"), entitled "Camera Based Sensing in Handheld, Mobile, Gaming, or Other Devices," claims priority to U.S. Provisional Application No. 60/142,777 filed on July 8, 1999. *See* Ex. B. The '924 Patent is a continuation of U.S. Patent

Application No. 12/834,281, which issued as the '431 Patent. *See id.* The '924 Patent shares the same specification as the '431 Patent.

3. The '079 Patent

U.S. Patent No. 8,553,079 (the "'079 Patent") is entitled "More Useful Man Machine Interfaces and Applications," and claims priority to U.S. Patent Application No. 60/107,652, filed on November 9, 1998. *See* Ex. C. The '079 Patent is directed towards a method for "determining a gesture illuminated by a light source utilizes the light source to provide illumination through a work volume above the light source." Ex. C at Abstract. The '079 Patent generally describes computer input devices in combination with at least one camera and a light source to observe points on the human body and optically sense human positions and/or orientations. Ex. C at Abstract; 1:54-2:6. For example, Figure 1 depicts a laptop with two cameras (100 and 101) pointed toward a work volume (170) to "determine the pointing direction vector 160 of the user's finger (for example pointing at an object displayed on screen 107), or the position and orientation of an object held by the user." Ex. C at 2:39-58. Alternatively, the embodiment may "determine gestures such as pinch or grip, and other examples of relative juxtaposition of objects with respect to each other[.]" Ex. C at 2:58-60.

4. The '949 Patent

U.S. Patent No. 8,878,949 (the "'949 Patent") is entitled "Camera Based Interaction and Instructions," and claims priority to U.S. Provisional Application No. 60/133,671 filed on May 11, 1999. *See* Ex. D. The '949 Patent is generally directed to using gestures in conjunction with digital imaging. '949 Patent, Abstract. The '949 Patent describes methods and apparatuses "to enhance the quality and usefulness of picture taking for pleasure, commercial, or other business

purposes.” ’949 Patent, 1:4-6. The claims of the ’949 Patent relate in general to “detect[ing] a gesture” and performing functions in response to the detected gestures. Ex. D at Claims 1, 8, 13.

The ’949 Patent describes improving the process of capturing images by analyzing a field of view and capturing an image when objects or gestures are detected. Ex. D at 1:50-2:8. The patent discloses numerous scenarios that cause an image to be captured when detected, such as: (1) when a “[s]ubject in a certain pose,” (2) a “[s]ubject in a sequence of poses,” (3) a “[p]ortion of [s]ubject in a sequence of poses (e.g., gestures),” (4) a “[s]ubject or portion(s) in a specific location or orientation,” (5) a “[s]ubject in position relative to another object or person” such as a “bride and groom kissing in a wedding,” and (6) “a subject undertak[ing] a particular signal comprising a position or gesture” such as “raising one’s right hand.” Ex. D at 5:30-49.

III. LEGAL STANDARD

GTP understands that the Court is well-aware of the legal standards for claim construction as established by *Markman*, *Phillips*, and their progeny. To the extent specific legal authority is required to support GTP’ positions, it is provided in the appropriate section below.

IV. CLAIM CONSTRUCTION ARGUMENTS

1. “means for controlling a function of said apparatus using said information”

The Parties agree that this term is subject to 35 U.S.C. §112 ¶6, but disagree as to the recited function and corresponding structure. Defendants improperly seek to interject extraneous limitations into the recited function to render the term indefinite. It is not.

A. Defendants’ recited function is improper.

Defendants propose that the recited function should be construed to include a series of extraneous limitations not recited in the claim, including “handheld computer” and “concerning a position or movement of said object positioned by a user operating said object.” That is improper. *See Micro Chemical, Inc. v. Great Plains Chemical Co.*, 194 F.3d 1250, 1258 (Fed Cir. 1999)

(“The statute [35 U.S.C. § 112 ¶ 6] does not permit limitation of a means-plus-function claim by adopting a function different from that explicitly recited in the claim.”). Defendants’ extraneous limitations are “over limiting and rewrite[]the claim.” *U.S. Ethernet Innovations, LLC v. Ricoh Ams. Corp.*, No. 6:12-cv-00235-MHS-JDL, 2013 U.S. Dist. LEXIS 117421, at *27 (E.D. Tex. Aug. 20, 2013) (Love, J.). As such, Defendants’ recited function should be rejected.

B. The “means for controlling” term is not indefinite.

The “means for controlling” term is not indefinite because the specification discloses structure for performing the recited function. A person of ordinary skill in the art (“POSITA”) would understand that the structure for this term is “a control system associated with a camera.” *See* Ex. E, Expert Declaration of Benedict Occhiogrosso in Support of Plaintiff’s Opening Claim Construction Brief, ¶54. The ’431 Patent specification describes the invention in terms of camera capabilities and their effect on the ability to control different devices through a control system:

Given the invention, the potential for target acquisition in a millisecond or two thus is achievable with simple pixel addressable CMOS cameras coming on stream now (today costing under \$50), assuming the target points are easily identifiable from at least one of brightness (over a value), contrast (with respect to surroundings), color, color contrast, and more difficult, shape or pattern (e.g., a plaid, or herringbone portion of a shirt). ***This has major ramifications for the robustness of control systems built on such camera based acquisition, be they for controlling displays, or machines or whatever.***

Ex. A at 5:50-60; Ex. E at ¶54. The ’431 Patent describes a control system associated with a camera that may be used to control “displays, or machines or whatever.” *Id.* This mirrors the language and recited function in claim 7: the camera means and means for controlling are in the same handheld computer apparatus, so the control system is associated with the camera. *See* Ex. A at Cl. 7; Ex. E at ¶54. Furthermore, the control system is used for controlling a function of that apparatus. *Id.* Therefore, a POSITA would recognize “a control system associated with a camera” is the structure clearly linked with the claimed function. Ex. E at ¶55; *see Telcordia Techs., Inc.*

v. Cisco Sys., 612 F.3d 1365, 1377 (Fed. Cir. 2010) (citing *Intel Corp. v. VIA Techs.*, 319 F.3d 1357, 1365-66 (Fed. Cir. 2003) (“[C]laim definiteness depends on the skill level of an ordinary artisan. . . Therefore, the specification need only disclose adequate defining structure to render the bounds of the claim understandable to an ordinary artisan.”)).

Defendants’ expert, Dr. Stevenson, improperly relies on Defendants’ proposed additional limitations to opine that this term is indefinite. *See* Stevenson Supp. Decl. at ¶6. But as discussed above, there is no basis for adding the new, unclaimed limitations to the claim language. The ’431 Patent is presumed to be valid, so Defendants must prove by clear and convincing evidence that a POSITA would not understand the bounds of the claim from the disclosed structure. *Telcordia Techs., Inc.*, 612 F.3d at 1377. Defendants cannot meet their burden because a POSITA would understand the bounds of the disputed terms in light of the disclosed structure. *See* Ex. E at ¶¶ 55-56.

2. “computer means within said housing for analyzing said image to determine information concerning a position or movement of said object”

The parties dispute whether this term is subject to 35 U.S.C. §112, ¶ 6. GTP contends that the word “computer” provides sufficient structure, so the term should not be construed under 112 ¶6. In the alternative, Defendants’ positions on to the function and structure of the term are incorrect.

A. “Computer” connotes sufficient structure for the recited function.

This term does not require construction under 35 U.S.C. §112, ¶ 6 because “computer” is a well-known term that connotes specific structure to a POSITA. Ex. E at ¶ 48. The claimed function is “analyzing to determine.” This is what computers do. They analyze data to determine things. Moreover, the surrounding claim language recites functionality that a POSITA would associate with a computer, namely analyzing and determining. The term “computer” recites

sufficient structure to a POSITA for performing the recited function “analyzing said image to determine information concerning a position or movement of said object.” Ex. E at ¶ 48. “Merely because a named element of a patent claim is followed by the word ‘means,’ . . . does not automatically make that element a ‘means-plus-function’ element under 35 U.S.C. § 112, ¶ 6.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015). The presumption for or against the application of 35 U.S.C. § 112, ¶ 6 “stands or falls according to whether one of ordinary skill in the art would understand the claim with the functional language, in the context of the entire specification, to denote sufficiently definite structure or acts for performing the function.” *Clear Imaging Research, LLC v. Samsung Elecs. Co.*, No. 2:19-cv-00326-JRG, 2020 U.S. Dist. LEXIS 202507, at *15 (E.D. Tex. Oct. 30, 2020). That is the case with this term. A POSITA would understand that the recited function is “analyzing said image to determine information concerning a position or movement of said object” and would recognize a computer as sufficient structure. Ex. E at ¶ 50-51.

B. Alternatively, Defendants’ recited function is improper, and their proposed corresponding structure includes structure that is not necessary to perform the recited function.

If the Court finds that this term is subject to 35 U.S.C. § 112, ¶ 6, GTP requests that the Court adopt GTP’s recited function and corresponding structure for the following reasons.

- i. Defendants attempt to inject additional limitations into the claim language by expanding the recited function.

Here again, Defendants seek to inject limitations into the recited function, this time in two different ways: (1) adding the phrase “positioned by a user operating said object” directly into the function, and (2) adding unclaimed functional limitations through their proposed structure. Defendants’ proposed structure improperly attempts to define the structure through the addition of the following unclaimed functions: (1) scan the pixel elements in a matrix array on which said

image is formed, and then calculate the centroid location “x,y” of a target on the object using the moment method; (2) add or subtract said image from prior images and identify movement blur; (3) obtain a time variant intensity change in said image from the detected output voltage from the signal conditioning of the camera means or by subtracting images and observing the difference due to such variation; or (4) detect a change in color reflected from a diffractive, refractive, or interference based element on said object that reflects different colors during movement.” Defendants concede that the appropriate structure is a computer. But they then attempt to introduce new, functional elements to the claim through “programming” of the computer. That is improper. Importing limitations into the recited function should not occur absent a disclaimer. *See Grantley Patent Holdings, Ltd. v. Clear Channel Communs., Inc.*, Civil Action No. 9:06CV259, 2008 U.S. Dist. LEXIS 1588, at *25 (E.D. Tex. Jan. 8, 2008) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005)(“[C]ourts should avoid importing limitations from the specification into the claim terms, absent a clear disclaimer of claim scope.)). The function in the claim is “analyzing said image to determine information concerning a position or movement of an object,” and nothing more. Ex. E at ¶ 49.

- ii. Defendants’ proposed structure is neither clearly linked to nor necessary to perform the recited function.

The term “a computer” is the structure disclosed and clearly linked in the specification for performing the recited function. For example, the ’431 Patent specification describes “a combination of one or more TV cameras (or other suitable electro-optical sensors) and a computer to provide various position and orientation related functions of use.” Ex. A at 11:55-58; Ex. E at ¶ 50. The specification also clearly links the computer with the recited function: “the computer connected to the camera analyzes the target images . . . determines the cell phone position and/or orientation” Ex. A at 12:47-50. “Analyzing to determine” is an ordinary function of a

computer. Ex. E at ¶¶ 50-51; *See In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a possible narrower construction of the terms 'processing,' 'receiving,' and 'storing,' . . . those functions can be achieved by any general purpose computer without special programming. As such, it was not necessary to disclose more structure than the general purpose processor that performs those functions.”); accord *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1365 (Fed. Cir. 2012) (“*In In re Katz*, we held that '[a]bsent a possible narrower construction' of the terms 'processing,' 'receiving,' and 'storing,' the disclosure of a general-purpose computer was sufficient. . . . In other words, a general-purpose computer is sufficient structure if the function of a term such as 'means for processing' requires no more than merely 'processing,' which any general-purpose computer may do without any special programming.”).

Even if “analyzing to determine” somehow required more, the claims explain how the computer must be arranged. It must be arranged to analyze an image and determine position or movement based on the image. Thus, the claim language provides all the structure needed. Defendants’ proposed structure is not “clearly linked or associated with the [recited] function” and incorporates “structure” beyond that necessary to perform the claim function. Section 112, ¶6 does not permit such additions. *See Micro Chem, Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1257 (Fed. Cir. 1999)(Section 112, ¶6 does not “permit incorporation of structure from the written description beyond that necessary to perform the claimed function.”). For example, scanning the pixel elements in a matrix array on which the image is formed pertains to capturing the image. *See* Ex. A at 4:48-62; Ex. E at ¶ 52. Obtaining intensity signals based on the output voltage from the signal conditioning means of a camera pertains to image capture—not analyzing the image. *See* Ex. A at 6:64-7:14, 7:22-29; Ex. E at ¶ 52. Furthermore, Defendants’ proposed structure goes

beyond what is necessary to achieve the claimed function. *Micro Chemical, Inc.*, 194 F.3d at 1258; *see also* Ex. E at ¶ 52. Defendants’ cited structure is not “necessary” to perform the recited function of analyzing said image to determine information. *See* Ex. E at ¶ 52. Defendants’ additional limitations address the types of data that could be analyzed, they do not form the structure for analyzing the data. *see* Ex. E at ¶ 52. That structure is the computer.

3. “display function which is controlled”

The parties dispute whether this term should be construed as a means-plus-function limitation under 35 U.S.C. § 112, ¶ 6. Defendants’ motive is transparent—they seek to severely limit the scope of this term to a computer with programmed functions. Defendants cannot overcome the presumption against this term being construed as means plus function.

The term at issue is “a display function which is controlled.” That term comes from dependent claim 9 of the ’431 Patent. The term does not use the word “means.” The term is not written in means-plus-function form, i.e., display function for performing a function. Rather, the claim language provides that the display function “is controlled.” The display function itself is a display mechanism that is sufficiently definite.

Defendants cannot overcome the rebuttable presumption that 35 U.S.C. § 112, ¶ 6 does not apply in the absence of the terms “means” or “step for” in the claim language. *See Williamson*, 792 F.3d at 1348. Section 112, ¶ 6 does not apply when, as here, “the claim language, read in light of the specification, recites sufficiently definite structure.” *Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1372 (Fed. Cir. 2015)) (quotation marks omitted) (citing *Williamson*, 792 F.3d at 1349). The term “display function” is not a generic term that “reflect[s] nothing more than verbal construct[] . . . that is tantamount to using the word ‘means[.]’” *Williamson*, 792 F.3d at 1350. Therefore, Defendants’ proposal should be rejected.

4. “sensing means associated with said device”

The parties dispute whether this term should be construed as a means-plus-function limitation under 35 U.S.C. § 112, ¶ 6.

A. “Sensing means” connotes sufficient structure for the recited function.

Again, Defendants contend that this term is subject to 35 U.S.C. § 112, ¶ 6 because of the use of “means.” But the term “sensing means” connotes sufficient structure to a POSITA to avoid 35 U.S.C. § 112, ¶ 6. *See Clear Imaging Research, LLC*, 2020 U.S. Dist. LEXIS 202507, at *15. A POSITA would understand that “sensing means” is simply a sensor. *See* Ex. E at ¶¶ 42-43. Specifically, a POSITA would understand that a “sensing means” is simply a sensor, which is a device that senses stimuli. *Id.* This is consistent with holdings in other courts. *See Koninklijke Philips N.V. v. Asustek Comput. Inc.*, No. 15-1125-GMS, 2017 U.S. Dist. LEXIS 106501, at *8 (D. Del. July 11, 2017) (construing “said sensing means” to mean a “sensor responsive to gravity.”). Here, the claimed “sensing means” is a sensor that electro-optically senses reflected light. The claim provides what the sensor must do—its objectives and operations. This connotes sufficiently definite structure.

B. Alternatively, the corresponding structure is an electro-optical sensor.

To the extent this term is subject to 35 U.S.C. § 112, ¶ 6, a POSITA would understand that the structure for the “sensing means” is an “electro-optical sensor.” Ex. E at ¶ 46. The ’431 Patent specification specifically states that the disclosed embodiments are not limited to cameras: “The invention herein and disclosed in portions of other copending applications noted above, comprehends a combination of one or more TV cameras (**or other suitable electro-optical sensors**)” Ex. A at 11:54-57 (emphasis added). Although some embodiments use cameras as an example of an electro-optical sensor, the specification contemplates that any “suitable electro-optical sensors” may be used in place of the described camera. Moreover, the recited

function, if any, recites “electro-optically sensing,” which means that any suitable electro-optical sensor would suffice. Sensors other than cameras can perform electro-optical sensing. From this, a POSITA would understand that any structure must include at least the group of sensors that are electro-optical sensors, as the specification repeatedly states. Ex. E at ¶ 47.

5. “means for transmitting information”

The parties agree that this term is subject to 35 U.S.C. §112, ¶6, but disagree as to the corresponding structure. Defendants’ structure should be rejected because the specification does not clearly link it to performing the recited function.

A POSITA would understand that “a transmitter” is the structure disclosed and clearly linked to the specification for performing the recited function. Ex. E at ¶ 57. The ’431 Patent specification describes the claimed handheld computer apparatus being implemented in, for example, a cell phone. Ex. A at 11:62-64 (describing Fig. 8A). The specification also describes using “the cell phones own connection” to transmit information. *See id.* at 12:65-13:7. But it does not limit the transmission of information to the cell phone’s cellular transceiver. A POSITA would understand that at the time of the invention, cellular phones and similar handheld devices included different types of transmitters, such as Bluetooth and Wi-Fi. Ex. E at ¶ 57. Therefore, the corresponding structure is a transmitter, not a specific type of transmitter or transceiver. *Id.*

Defendants’ proposed structure of “cellular transceiver” unnecessarily limits the term and goes beyond what is necessary to perform the recited function. *See Micro Chemical, Inc.*, 194 F.3d at 1258; *see also* Ex. E at ¶ 57. The recited function is “transmitting information.” A transceiver is capable of both transmitting and receiving information. Ex. E at ¶ 58. The recited function does not recite receiving information; therefore, a receiver is not necessary for performing the claimed function. *Id.* Any construction that would include a receiver would include structure not necessary to perform the recited function. *Id.*

6. “a light source for illuminating said object”

Defendants’ proposal rewrites the unambiguous claim language to both (1) read out limitations from the claim and (2) add new limitations to the claim that do not exist. Neither is permitted under the law. As the Federal Circuit instructs, “First, we look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention.” *Vitronics Corp. v. Conceptronic*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Claim 12 of the ’431 Patent states, “Apparatus according to claim 7, further including a light source for illuminating said object.” See Ex. A at Claim 11. This language is clear on its face and requires no further construction. When a claim term or phrase is readily comprehensible to the finder of fact, the term or phrase requires no construction. See *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“The purpose of claim construction is “to clarify and when necessary to explain what the patentee covered by the claims.”). As the Court has previously noted, “although every word used in a claim has a meaning, not every word requires a construction.” *Orion IP, L.L.C. v. Staples, Inc.*, 406 F.Supp.2d 717, 738 (E.D. Tex. 2005) (Leonard, J.).

Defendants’ construction rewrites this plain claim language to remove “illuminating,” replacing it with “designed to transmit light directly onto” in the claim. By doing so, Defendants fundamentally rewrite and alter the scope of the claim by requiring that the “light source” be “designed to transmit light directly onto said object.” That alters the ordinary meaning of the claimed phrase without any disclaimer whatsoever. Nothing in the specification or prosecution history requires a light source to illuminate an object directly, or excludes indirect illumination.

As with most of their constructions, this proposal by Defendants departs from the plain and ordinary meaning of the claim language. But the Defendants cannot show that either of the two permissible bases for doing so exists: (1) no lexicography; and (2) no clear and unmistakable disclaimer. Accordingly, GTP requests that the Court reject Defendants’ construction.

7. “wherein said movement is sensed in 3 dimensions”

Again, Defendants propose rewriting unambiguous claim language to both (1) read out limitations from the claim and (2) add new limitations to the claim that do not exist. First, Defendants seek to change the term “sensed” to “determined;” however, these terms are not synonymous. For example, sensing that movement has occurred in three dimensions does not require determining the distance or direction of movement.

Moreover, Defendants seek to impose a specific coordinate system on this limitation when the claim does not require one. Defendants’ construction would require use of a coordinate system with three perpendicular axes. But other coordinate systems are commonly used for measuring three-dimensional space, such as the spherical coordinate system, which measures three dimensions using a radial distance, a polar angle measured, and an azimuthal angle. Only two orthogonal (i.e., perpendicular) directions are needed in the spherical coordinate system. Therefore, Defendants’ proposed construction is improper. Accordingly, GTP requests that the Court reject Defendants’ construction.

8. “wherein said information is obtained in 3 dimensions”

As with the previous term, Defendants seek to improperly impose a specific coordinate system on this term, when no such requirement is recited in the claims or required by the intrinsic record. Accordingly, GTP requests that the Court reject Defendants’ construction.

9. “electro-optically sensing” / “electro-optical sensing”

As with many of Defendants’ proposals, their proposals for these terms rewrite unambiguous claim language to add new limitations that do not exist. The terms “electro-optically sensing” and “electro-optical sensing” are clear on their face and do not require construction. “[A]bsent contravening evidence from the specification or prosecution history, plain and unambiguous claim language controls the construction analysis.” *DSW, Inc. v. Shoe Pavilion, Inc.*,

537 F.3d 1342, 1347 (Fed. Cir. 2008). Courts are not required to construe claim terms with well-understood meanings, lest they be “inundated with requests to parse the meaning of every word in the asserted claims.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008).

Defendants’ proposed construction changes the fundamental nature of “electro-optical.” By adding “measuring changes to an electric field,” Defendants have changed the sensing from “electro-optical” to just “electrical.” Not only is that improper absent a clear and unmistakable disclaimer, it also reads out specifically contemplated embodiments. For example, the specification describes using color changes as a sensing technique: “When illuminated by white light for example from lamp 450, it reflects the spectrum such that when the object has moved to a new position P’ the color (or colors, depending on the grating type, and angles involved) returning to the camera 460 is changed.” Ex. A at 9:2-6. And the claim language itself claims sensing “light,” which is an electromagnetic field, not an electric field as Defendants propose. Thus, absent a clear and unmistakable disclaimer—there is none—Defendants’ construction should be rejected.

10. “oriented to view”

GTP respectfully submits that the Court should decline to construe this term because the meaning of “oriented to view” is clear and unambiguous. There is simply no basis to overcome the “heavy presumption” that this term should be given its plain and ordinary meaning. *See Epistar Corp. v. ITC*, 566 F.3d 1321, 1334 (Fed. Cir. 2009). “Oriented” and “to view” are simple terms that even a lay juror would understand and be able to apply in determining infringement. As the *O2 Micro* court found, in “some cases, the ordinary meaning of claim language . . . may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *O2 Micro Int’l Ltd.*

v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1360 (Fed. Cir. 2008). Therefore, GTP respectfully requests that the Court rejects Defendants’ proposed construction.

11. “oriented to view a user”

Defendants assert that the term “oriented to view a user” is indefinite under *IPXL Holdings* for supposedly claiming an apparatus and method of using the apparatus. That is not the case. *IPXL* applies when a claim “recites two separate statutory classes of invention, e.g., ‘an apparatus and a method of using that apparatus,’ . . .” *Smartphone Techs. LLC v. Research in Motion Corp.*, No. 6:10cv74 LED-JDL, 2012 U.S. Dist. LEXIS 108370, at *9 (E.D. Tex. Aug. 2, 2012) (Love, J.). “Whether claim language is indefinite for improperly mixing claim forms depends on whether the language used is directed at user actions or system capabilities.” *Motion Games, LLC v. Nintendo Co.*, No. 6:12-cv-878-JDL, 2015 U.S. Dist. LEXIS 180229, at *12-13 (E.D. Tex. Jan. 16, 2015) (Love, J.) (citing *In re Katz*, 639 F.3d at 1318). “The relevant inquiry is whether the claim as a whole provides reasonable certainty to one of ordinary skill in the art about the subject matter it covers.” *CryptoPeak Sols., LLC v. Lowe’s Home Ctrs.*, No. 2:15-cv-1737-RWS-RSP, 2016 U.S. Dist. LEXIS 135666, at *15 (E.D. Tex. Sep. 9, 2016) (Payne, J). In analyzing the claim, the Court determines “whether the claim leaves the reader ‘unclear whether infringement [] occurs when one creates a system that allows the user to [practice the claimed method step], or whether infringement occurs when the user actually [practices the method step].” *Id.* (quoting *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005)). As acknowledged by the Court, “the holding in *IPXL* is ‘very limited.’” *Motion Games, LLC.*, 2015 U.S. Dist. LEXIS 180229, at *8 (citations omitted).

The context of Claim 1 makes clear that it is not claiming both an apparatus and method of use:

1. A **handheld device** comprising:

a housing;
 a computer within the housing;
a first camera oriented to view a user of the handheld device and having
 a first camera output; and
 a second camera oriented to view an object other than the user of the device
 and having a second camera output, wherein the first and second cameras
 include non-overlapping fields of view, and wherein the computer is
 adapted to perform a control function of the handheld device based on at
 least one of the first camera output and the second camera output.

Ex. B at Cl. 1 (emphasis added). The preamble is clear: Claim 1 is directed toward an **apparatus** (the “handheld device”). The disputed term is merely describing the direction in which the first camera is facing. “[O]ne of ordinary skill would understand that Claim 1 is limited to an apparatus and any infringement occurs upon creation of the claimed system.” *Smartphone Techs. LLC*, 2012 U.S. Dist. LEXIS 108370, at *25. There is simply no basis for Defendants’ assertion that this term is indefinite under *IPXL*.

For the claim to be indefinite, Defendants must prove by clear and convincing evidence that the claim term “when read in light of the specification delineating the patent, and the prosecution history, fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments*, 572 U.S. 898, 901 (2014). Defendants cannot meet that high burden. As discussed, the claim term is part of the larger “first camera” term. It is the orientation of a claimed component, not a mixed method. The term is definite and properly claimed.

12. “oriented to view an object other than the user”

For the same reasons discussed above with respect to “oriented to view a user,” Defendants’ assertion that this claim is indefinite under *IPXL* is also wrong. The term “oriented to view an object other than the user” is merely describing the orientation of the second camera. Ex. B at Claim 1. Therefore, this term is not indefinite.

13. “wherein the gesture is performed by a person other than the user of the handheld device”

Defendants here again seek to apply *IPXL* incorrectly. This term is from dependent claim 9, which depends on dependent claim 6, which depends from claim 1. Claims 6 and 9 are reproduced below for reference:

6. The handheld device of claim 1 wherein the computer is operable to determine a gesture based on at least one of the first camera output and the second camera output.

9. The handheld device of claim 6 wherein the gesture is performed by a person other than the user of the handheld device.

Claim 6 adds the limitation that the computer in claim 1 is “operable to determine a gesture.” Claim 9 adds the additional limitation that “the gesture is performed by a person other than the user of the handheld device.” The Federal Circuit has made clear that “apparatus claims are not necessarily indefinite for using functional language.” *See, e.g., Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008) (citing *Halliburton Energy Servs. v. M-I LLC*, 514 F.3d 1244, 1255 (Fed. Cir. 2008)). “A claim term is functional when it recites a feature ‘by what it does rather than by what it is.’ (e.g., as evidenced by its specific structure or specific ingredients).” *Manual of Patent Examining Procedure* § 2173.05(g) (9th ed. 2020) (citing *In re Swinehart*, 439 F.2d 210, 212 (CCPA 1971)). Here, the term does not recite functional language. Instead, it is describing that the gesture detected by the computer is performed by a user other than the user of the handheld device. Therefore, this term is not indefinite.

14. “a computer within the housing . . . wherein the computer is adapted to perform a control function of the handheld device based on at least one of the first camera output and the second camera output”

Again, Defendants improperly assert that a term is governed by 35 U.S.C. § 112, ¶6. It is not. The term does not contain “means” or “step for,” resulting in the rebuttable presumption that

35 U.S.C. § 112, ¶ 6 does not apply. In light of the claim language itself and the specification, the term recites sufficiently definite structure. *Media Rights Techs., Inc.*, 800 F.3d at 1372 (citing *Williamson*, 792 F.3d at 1349). Claim 1 recites a “handheld device” comprising several elements, including “a housing,” “a computer within the housing,” and first and second cameras. *See* Ex. B at Cl. 1. Additionally, “a computer within the housing” also recites sufficient structure to a POSITA. *See* Ex. E at ¶ 60. This informs a POSITA that “a computer,” which is a well-understood term, is located within the claimed housing of the “handheld device.” *Id.* Therefore, this term is not subject to 35 U.S.C. § 112, ¶ 6. If Defendants were correct, no patent claims could exist that recite “a computer” that does a task without being labeled as a means-plus-function term. That is clearly not the law.

15. “gesture”

The term “gesture” is recited in several of the Asserted Patents. GTP respectfully submits that the Court should decline to construe this term because the meaning of “gesture” is clear and unambiguous. “Gesture” is a simple term that a lay juror would understand and be able to apply in determining infringement. *See O2 Micro Int’l Ltd.*, 521 at 1360. Additionally, Defendants’ proposal injects the vague phrase “conveys a meaning.” Nothing in the specification or the prosecution history supports such a construction. Gestures can be made without an associated meaning. Therefore, GTP respectfully requests that the Court reject Defendants’ proposed construction because the term does not require construction.

16. “adapted to”

The term “adapted to,” which is recited in several of the Asserted Patents, is well understood and does not require construction. Defendants seek to construe “adapted to” differently depending on the claim term with which it is associated. That is improper. “Adapted to” should be given the same meaning across all claims. Additionally, “adapted to” does not mean

“programmed to” or “designed to,” and Defendants can find no support for such a construction. At least once before, the Court has found that “‘adapted to’ is not ambiguous . . . and no further construction is needed.” *Profectus Tech. LLC v. Huawei Techs. Co., Ltd.*, No. 6:11-cv-474, 2014 U.S. Dist. LEXIS 53157, at *29 (E.D. Tex. Apr. 16, 2014) (Schneider, J.) (citing *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1322-23 (Fed. Cir. 2003)). Therefore, Defendants’ proposed construction should be rejected.

17. “light source adapted to direct illumination through a work volume above the light source” / “light source adapted to illuminate a human body part within a work volume generally above the light source” / “light source in fixed relation relative to the camera and adapted to direct illumination through the work volume”

While Defendants propose these phrases for construction, they actually seek construction of the terms “adapted to,” “direct illumination,” and “illuminate.” As discussed above, “adapted to” is well-understood and requires no construction. Additionally, as discussed above with respect to the similar term in the ’431 Patent, Defendants seek to change the claims from directing illumination to “transmitting” light directly onto a body part or through a work volume. That change finds no support in the claim language or the specification. Nothing in the claim language or the specification excludes illumination through other means. As the claims recite, the light source must simply illuminate. Therefore, Defendants’ proposed construction should be rejected.

18. “a processor adapted to determine the gesture performed in the work volume and illuminated by the light source based on the camera output”

The term “processor” is not a means-plus-function term. It does not use the word “means,” creating a presumption that 35 U.S.C. § 112, ¶6 does not govern its construction. *See Williamson*, 792 F.3d at 1348. Nor is the term “processor” a nonce term that might otherwise invoke means-plus-function treatment. *See id.* at 1350.

Since *Williamson*, the Court has repeatedly found that “processor” connotes specific structure and is not a means-plus-function term. The Court’s decision in *Syncpoint* is instructive. *SyncPoint Imaging, LLC v. Nintendo of Am. Inc.*, No. 2:15-cv-00247-JRG-RSP, 2016 U.S. Dist. LEXIS 677, at *18–20 (E.D. Tex. Jan. 5, 2016) (Payne, J). In *Syncpoint*, the Court discussed Federal Circuit precedent in concluding that the term “processor” was not means-plus-function for three reasons:

- 1) “‘processor’ connotes structure;”
- 2) the claim “itself recites the objectives and operations of the processor in the ‘processor . . . for’ limitation;” and
- 3) “one of ordinary skill in the art would understand the structural arrangements of the processor from the recited objectives and operations of the processor.”

Id. at *20. Since *Syncpoint*, the Court has repeatedly cited and applied this analysis to find that “processor” is not means-plus-function.² The same analysis applies here.

Claim 11 recites a “computer apparatus” and three components: (1) a light source, (2) a camera, and (3) a processor. *See* Ex. C at Cl. 11. The term “a processor” recites sufficient structure to a POSITA such that they would understand that “a processor” is a microprocessor, computer,

² *See, e.g., Optis Cellular Tech., LLC v. Kyocera Corp.*, No. 2:16-cv-0059-JRG-RSP, 2017 U.S. Dist. LEXIS 18191, at *73-76 (E.D. Tex. Feb. 8, 2017) (Payne, J) (finding that “data processor” is not means-plus-function); *Panoptis Patent Mgmt., LLC v. Blackberry Ltd.*, No. 2:16-CV-62-JRG-RSP, 2017 U.S. Dist. LEXIS 16650, at *48-53 (E.D. Tex. Feb. 6, 2017) (Payne, J.) (finding that “a processor for associating a text message with an attachment” not means-plus function); *Cellular Communs. Equip. LLC v. AT&T, Inc.*, No. 2:15-CV-576-RWS-RSP, 2016 U.S. Dist. LEXIS 174666, at *94-99 (E.D. Tex. Dec. 18, 2016) (Payne, J.) (finding the term “processor [is] [further] configured to . . .” was not means-plus-function); *Advanced Mktg. Sys., LLC v. CVS Pharmacy, Inc.*, No. 6:15-cv-134-JRG-KNM, 2016 U.S. Dist. LEXIS 58472, at *65-69 (E.D. Tex. May 3, 2016) (Mitchell, J.) (finding that “data processor for” was not means-plus-function); *see also Smartflash LLC v. Apple Inc.*, No. 6:13-CV-447-JRG-KNM, 2015 U.S. Dist. LEXIS 91669, at *17 (E.D. Tex. July 6, 2015) (Gilstrap, J) (“processor” not means-plus-function).

or central processing unit. Ex. E at ¶ 77. “[T]he Court in *St Isidore* noted, ‘in many instances, the term ‘processor’ itself connotes sufficient structure” and “the Court has typically found ‘processor’ to connote sufficient structure to avoid [means-plus function claiming].” *Realtime Data, LLC v. Rackspace US, Inc.*, No. 6:16-CV-00961 RWS-JDL, 2017 U.S. Dist. LEXIS 92131, at *46-47 (E.D. Tex. June 14, 2017) (Love, J) (quoting *St. Isidore Research, LLC v. Comerica Inc.*, No. 2:15-cv-1390-JRG-RSP, 2016 U.S. Dist. LEXIS 126866, at *3 (E.D. Tex. Sep. 18, 2016) (Payne, J)). A POSITA would also understand that the claimed “a processor” is operatively coupled to the sensor and to the digital camera. The claim provides the objectives and operations of the processor—“determine the gesture performed in the work volume.” A POSITA would understand the structure arrangement of the claimed processor from this.

Defendants’ indefiniteness argument is premised on its argument that “processor” is a means-plus-function term. It is not. As such, the term should not be found indefinite.

19. “three-dimensional position”

Here again, Defendants seek to limit a term regarding three dimensions to specific coordinate systems, without any support for so narrowing the scope of the term. Accordingly, Defendants’ construction should be rejected for the same reasons discussed above with respect to the term “wherein said movement is sensed in 3 dimensions.”

20. “work volume above the light source” / “work volume generally above the light source” / “work volume above the camera”

Again Defendants’ proposal rewrites unambiguous claim language to add new limitations to the claim that do not exist. That is not appropriate. Defendants’ construction would insert the term “visible to the camera within which gestures are performed” into the claims. There is no support in the ’079 Patent specification for Defendants’ construction; nothing limits the work volume to an area that is “visible to the camera within which gestures are performed.” Likewise,

while Defendants cite the prosecution history for U.S. Patent App. No. 09/433,297, they do so without any specific reference to any alleged disclaimer made therein. The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton, Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002). Statements will constitute a disclaimer of scope only if they are “clear and unmistakable statements of disavowal.” *See Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1358 (Fed. Cir. 2003). An “ambiguous disavowal” does not suffice. *Schindler Elevator Corp. v. Otis Elevator Co.*, 593 F.3d 1275, 1285 (Fed. Cir. 2010) (citation omitted). Defendants cannot meet this standard because there was no disclaimer.

21. “forward facing portion”

The term “forward facing portion” is clear. To prove indefiniteness, Defendants must prove by clear and convincing evidence that the claim term “when read in light of the specification delineating the patent, and the prosecution history, fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc.*, 572 U.S. at 901 (2014). Defendants cannot meet this high burden.

The claim term provides orientation for the first camera—it is not indefinite. There is nothing indefinite about this term, which appears in Claims 1, 8, and 13. Claim 1 introduces this term as “a device housing including *a forward facing portion, the forward facing portion of the device housing encompassing an electro-optical sensor . . .*” Ex. D at Cl. 1. Claims 8 states “providing a portable device including *a forward facing portion encompassing a digital camera and an electro-optical sensor*” and Claim 13 states “a device housing including a forward facing portion, the forwarding facing portion encompassing . . .” *Id.* at Cl. 8 and 13. All three claims provide explicit antecedent bases for the term “forward facing portion” such that a POSITA would understand it. Additionally, when read in light of the specification, a POSITA would understand

that the term is referring to a certain side of the claimed apparatus. Accordingly, Defendants cannot show by clear and convincing evidence that this term is indefinite. *See Intel Corp.*, 319 F.3d at 1366 (Fed. Cir. 2003).

22. “forward facing light source”

As with the previous term, this is also clear and unambiguous. This claim element appears in dependent Claims 5 and 13, which depend on independent Claims 1 and 8. Claim 5 states, “The portable device of claim 1 further including *a forward facing light source*” while Claim 13 mirrors the language. Ex. D at Cl. 5 and 13. When read in light of the independent claims, this term is referring to a “forward facing light source” that is included in the “forward facing portion” of the claimed apparatus. *See Ex. D at Cl. 1 and 8.* As with the term “forward facing portion,” Defendants have not shown by clear and convincing evidence that this term is indefinite. *See Intel Corp.*, 319 F.3d at 1366 (Fed. Cir. 2003).

23. “the detected gesture is identified by the processing unit apart from a plurality of gestures”

Defendants contend this term is indefinite, including for lack of antecedent basis, but there is nothing indefinite about the term. The term appears in Claim 13, the relevant portion which is reproduced below:

13. An image capture device comprising:
 - a device housing including a forward facing portion, the forwarding facing portion encompassing a digital camera adapted to capture an image and having a field of view and encompassing **a sensor adapted to detect a gesture** in the digital camera field of view; and
 - a processing unit operatively coupled to the sensor and to the digital camera, wherein the processing unit is adapted to:
 - detect a gesture has been performed in the electro-optical sensor field of view based on an output of the electro-optical sensor, and correlate **the gesture detected by the sensor** with an image capture function and subsequently capture an image using the digital camera, wherein **the detected gesture is identified by the processing unit apart from a plurality of gestures.**

See Ex. D at Cl. 13 (emphasis added). A POSITA would understand that “the detected gesture” and “the gesture detected by the sensor” refer to “a gesture” that is detected by the sensor. *Id.*; Ex. E at ¶ 74. There is nothing unclear about this claim language, and one of skill in the art would easily understand the scope of the claim. See *Energizer Holdings v. ITC*, 435 F.3d 1366, 1370 (Fed. Cir. 2006) (“When the meaning of the claim would reasonably be understood by persons of ordinary skill when read in light of the specification, the claim is not subject to invalidity upon departure from the protocol of ‘antecedent basis.’”); *Trover Group, Inc. v. Dedicated Micros USA*, 2015 U.S. Dist. LEXIS 33876, at *32 (E.D. Tex. Mar. 19, 2015) (Bryson, J.) (“While the error regarding the absent antecedent is clumsy, it does not make it difficult to understand what the limitation covers, and despite the error, a person of skill in the art would readily understand the meaning of the claim.”). The term has antecedent basis because it is referring to the gesture that the sensor detects. Additionally, to the extent Defendants argue that this term is indefinite for the reasons discussed below for “the electro-optical sensor terms,” GTP incorporates its response as set forth below.

24. “the electro-optical sensor” / “the electro-optical sensor field of view”

Defendants incorrectly assert that these terms are indefinite, including for lack of antecedent basis. The relevant portion of Claim 13 reads as follows:

13. An image capture device comprising:

a device housing including a forward facing portion, the forwarding facing portion encompassing a digital camera adapted to capture an image and having a field of view and encompassing **a sensor adapted to detect a gesture** in the digital camera field of view; and

...

detect a gesture has been performed **in the electro-optical sensor** field of view based on an output of **the electro-optical sensor**; and . . .

See Ex. D at Cl. 13 (emphasis added). A POSITA would understand that the reference to “the electro-optical sensor” in the context of the processing unit element refers to “a sensor adapted to detect a gesture” described earlier in the claim. Ex. E at ¶ 72. The context of the claim makes this clear: the first element of the claim is for a “device housing” that includes a digital camera and “a sensor adapted to detect a gesture in the digital camera field of view.” *See* Ex. D at Cl. 13. A POSITA would understand that a “sensor” “in the digital camera field of view” is an electro-optical sensor. Specifically, the claim recites “detect[ing] a gesture has been performed” by “the electro-optical sensor.” Ex. E at ¶ 72. Therefore, a POSITA would understand that “the electro-optical sensor” is referring to “a sensor” from earlier in Claim 13. *Id.* Defendants’ proposal should be rejected.

25. **“a processing unit within the device housing and operatively coupled to an output of the electro-optical sensor, wherein the processing unit is adapted to: determine a gesture has been performed in the electro-optical sensor output, and control the digital camera in response to the gesture performed in the electro-optical sensor field of view, wherein the gesture corresponds to an image capture command, and wherein the image capture command causes the digital camera to store an image to memory.”**

As with many of the terms in dispute, Defendants seek to have this term construed under 35 U.S.C. § 112, ¶ 6 despite the lack of the use of the term “means” or “step for.” *See Williamson*, 792 F.3d at 1348. Defendants improperly seek construction under 35 U.S.C. § 112, ¶ 6 in an attempt to render the term invalid as indefinite.

Claim 1 recites a “portable device” comprising “a device housing” with portions and sensors. Ex. D at Claim 1. It also recites “a processing unit within the device housing and operatively coupled to an output of the electro-optical sensor.” *Id.* A POSITA would understand that both limitations describe the physical relationship and connections between the recited components of the claimed “portable device.” Ex. E at ¶ 63. The term “a processing unit” recites

sufficient structure to a POSITA such that they would understand that “a processing unit” is a microprocessor, computer, or central processing unit. *Id.*

This claim term would inform a POSITA that the claimed “a processing unit” is physically located within the device housing and is operatively coupled to an output of the electro-optical sensor. Ex. E at ¶ 64. Furthermore, a POSITA would understand that the claimed processing unit is also not being functionally claimed. *Id.* Rather, the claim states that “wherein the processing unit is adapted to: (1) “determine a gesture has been performed in the electro-optical sensor field of view based on the electro-optical sensor output and (2) control the digital camera in response to the gesture performed in the electro-optical sensor field of view, wherein the gesture corresponds to an image capture command, and wherein the image capture command causes the digital camera to store an image to memory.” Ex. D at Cl. 1. A POSITA would understand that this language is structural and not functional. Ex. E at ¶ 64. The particular processing unit must be capable of being programmed to have the capabilities recited in the claims. Accordingly, this term is not indefinite.

26. “processing unit”

Like the “processing unit” term discussed above, this term is not subject to 35 U.S.C. § 112, ¶6. Nor is this term indefinite. It does not contain the words “means” or “step for,” so it is presumed to not be a means-plus-function term. *See Williamson*, 792 F.3d at 1348. This term appears in Claim 8, which is a computer implemented method:

8. A *computer implemented method* comprising:

providing a portable device including a forward facing portion encompassing a digital camera and an electro-optical sensor, the electro-optical sensor having an output and defining a field of view;

determining, using **a processing unit**, a gesture has been performed in the electro-optical sensor field of view based on the **electro-optical sensor output**, wherein the

determined gesture corresponds to an image capture command; and capturing an image to the digital camera in response to the determined gesture corresponding to the image capture command.

Ex. D at Cl. 8 (emphasis added). Similar to the previous term, the first step of the method recites providing a portable device with portions and sensors followed by a determining step, “using a processing unit.” *Id.* A POSITA would understand that both limitations describe the physical relationship and connections between the recited components of the claimed “portable device.” Ex. E at ¶ 66. The term “a processing unit” recites sufficient structure to a POSITA such that they would understand that “a processing unit” is a microprocessor, computer, or central processing unit. *Id.* This claim term would inform a POSITA that the claimed “processing unit” makes a determination based on the “electro-optical sensor output.” *Id.* at ¶ 67. This language is not functional but is structural, as the particular processing unit must be capable of receiving the “electro-optical sensor output” and making a determination. *Id.*

GTP contends that this term is not subject to 35 U.S.C. § 112, ¶ 6, consistent with the Court’s previous holdings on the term “a processing unit.” *See Huawei Techs. Co. v. T-Mobile US, Inc.*, No. 2:16-CV-00056-JRG-RSP, 2017 U.S. Dist. LEXIS 79836, at *71 (E.D. Tex. May 24, 2017) (Payne, J.) (finding that term “processing unit” is not subject to § 112, ¶ 6.); *see also Samsung Elecs. Am., Inc. v. Prisia Eng’g Corp.*, 948 F.3d 1342, 1353-54 (Fed. Cir. 2020) (finding that the term “‘digital processing unit’ is not a ‘means-plus-function’ limitation subject to analysis under section 112, paragraph 6” and that the term was “clearly [] a stand-in for a ‘general purpose computer’ or a ‘central processing unit,’ each of which would be understood as a reference to structure in this case, not simply any device that can perform a particular function.”). Accordingly, this term is not indefinite.

27. **“processing unit operatively coupled to the sensor and to the digital camera, wherein the processing unit is adapted to: detect a gesture has been performed in the electro-optical sensor field of view based on an output of the electro-optical sensor, and correlate the gesture detected by the sensor with an image capture function and subsequently capture an image using the digital camera, wherein the detected gesture is identified by the processing unit apart from a plurality of gestures.”**

Here again, as with the other “processing unit” terms, Defendants improperly seek construction under 35 U.S.C. § 112, ¶ 6, in an attempt to invalidate. This term does not contain the words “means” or “step for,” so it is presumed to not be a means-plus-function term. *See Williamson*, 792 F.3d at 1348. This term appears in Claim 13, which recites an “image capture device” comprising a “device housing” with portions and sensors. *See* Ex. D at Cl. 8. It further recites “a processing unit operatively coupled to the sensor and to the digital camera.” *Id.* A POSITA would understand that both limitations describe the physical relationship and connections between the recited components of the claimed “image capture device.” Ex. E at ¶ 69. As discussed above, and previously recognized by the Court, the term “a processing unit” recites sufficient structure to a POSITA such that they would understand that “a processing unit” is a microprocessor, computer, or central processing unit. *Id.*; *Huawei Techs. Co.*, 2017 U.S. Dist. LEXIS 79836, at *71; *see also Samsung Elecs. Am., Inc.*, 948 F.3d at 1353-54.

This claim term would inform a POSITA that the claimed “a processing unit” is operatively coupled to the sensor and to the digital camera. Ex. E at ¶ 70. Additionally, a POSITA would understand that the claimed processing unit is not being functionally claimed. *Id.* Rather, the claim states that “wherein the processing unit is adapted to: (1) detect a gesture has been performed in the electro-optical sensor field of view based on an output of the electro-optical sensor and (2) correlate the gesture detected by the sensor with an image capture function and subsequently capture an image using the digital camera, wherein the detected gesture is identified by the processing unit apart from a plurality of gestures.” This language is not functional but structural.

See Ex. E at ¶ 69. The particular processing unit must be capable of being programmed to have the capabilities recited in the claims. Ex. E at ¶ 69. Accordingly, this term is not indefinite.

28. “electro-optical sensor”

As with the electro-optical terms identified with respect to the ’431 Patent, this term does not require construction. There is no evidence in the specification or prosecution history to deviate from the term’s ordinary meaning. See *DSW, Inc. v. Shoe Pavilion, Inc.*, 537 F.3d 1342, 1347 (Fed. Cir. 2008). An electro-optical sensor is well-understood to be a sensor that converts optical signals into an electric signal. See Ex. E at ¶ 72 (“[A]n electro-optical sensor [] converts an optical signal (i.e., light) to an electrical signal.”) Accordingly, Defendants’ proposal should be rejected.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on August 15, 2021, the undersigned caused a copy of the foregoing document to be served on all counsel of record, via the Court's CM/ECF system, pursuant to the Federal Rules of Civil Procedure.

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